



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Joseph A. Zupanick  
Serial No. : 10/630,345  
Filed : July 29, 2003  
Title : METHOD AND SYSTEM FOR ACCESSING SUBTERRANEAN DEPOSITS  
FROM THE SURFACE AND TOOLS THEREFOR

Art Unit : 3673  
Examiner : John J. Kreck  
Conf. No. : 9309

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request. A copy of a communication from a foreign patent office in a counterpart application is also enclosed.

This statement is being filed after a first Office action on the merits, but before receipt of a final Office action or a Notice of Allowance. A check for \$180 in payment of the late submission fee of §1.17(p) is enclosed. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 17601-043001.

Respectfully submitted,

Date: February 26, 2007

Sean M. Dean  
Sean M. Dean, Ph.D.  
Reg. No. 46,656

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906  
21544428.doc

03/01/2007 AWONDAF1 00000006 10630345

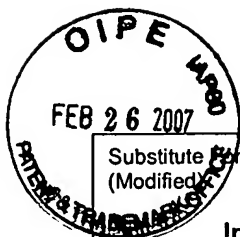
01 FC:1006

100.00 0P

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EV828214612US

February 26, 2007  
Date of Deposit



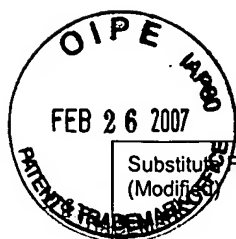
Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-043001	Application No. 10/630,345
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant <b>Joseph A. Zupanick</b>	
		Filing Date <b>July 29, 2003</b>	Group Art Unit <b>3673</b>

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	A1	2,452,654	11/02/1948	E.P. Hayes et al.			
	A2	3,362,475	01/09/1968	J.L. Huitt et al.			
	A3	4,296,969	10/28/1981	Willman			
	A4	4,458,767	07/10/1984	Hoehn, Jr.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	B1	WO 03/038233	05/08/2003	WIPO			N/A	
	B2	RU 2097536 C1	11/27/1997	Russia			Abstract Only	
	B3	RU 2136566 C1	09/10/1999	Russia			Y	
	B4	RU 2176311 C2	11/27/2001	Russia			Abstract Only	
	B5	RU 2179234 C1	02/10/2002	Russia			Y	
	B6	RU 2205935 C1	06/10/2003	Russia			Abstract Only	
	B7	SU 1448078 A1	12/30/1988	Russia			Y	
	B8	SU 1709076 A1	01/30/1992	Russia			Y	

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	C1	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion (5 pages) for International Application No. PCT/US2005/005289 mailed September 8, 2006
	C2	Invitation to Pay Additional Fees (2 pages) and Annex to Form PCT/ISA/206 Communication Relating to the Results of the Partial International Search (3 pages) for International Application No. PCT/US2006/021057 mailed September 11, 2006
	C3	Kalinin, D. G., et al., Translation of Selected Pages, "Boring Direction and Horizontal Wells," Moscow, "Nedra", 1997, p. 11-12, 148-152 (15 pages)
	C4	Evaluation of Coalbed Methane Well Types in the San Juan Basin, prepared by Malkewicz Hueni Associates, Inc. for The Bureau of Land Management, March 2004, 23 pages
	C5	Chase, Robert William, "Degasification of Coal Seams Via Vertical Boreholes: A Field and Computer Simulation Study," Thesis in Petroleum and Natural Gas Engineering, March 1980, 174 pages

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-043001	Application No. 10/630,345
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant <b>Joseph A. Zupanick</b>	
		Filing Date <b>July 29, 2003</b>	Group Art Unit <b>3673</b>

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	C6	Shuck, L. Z. and Pasini III, J., "In Situ Gasification of Eastern Coals," presented at the proceedings of the Coal Processing and Conversion Symposium, June 1-3, 1976, Morgantown, West Virginia, 16 pages
	C7	Logan, Terry L., "Application of Medium Radius Horizontal Drainhole Drilling Technology for Underground Coal Gasification," presented at 13 <sup>th</sup> Annual Underground Coal Gasification Symposium, August 24-26, 1987, Laramie, Wyoming, 10 pages
	C8	Lindblom, S. R. and Smith, V. E., "Rocky Mountain 1 Underground Coal Gasification Test," Hanna, Wyoming, Groundwater Evaluation, DOE Grant No. DE-FG21-88MC25038, Final Report, June 10, 1988 – June 30, 1993, 5 pages
	C9	Coal-Bed Methane: Potential and Concerns, U.S. Department of the Interior, U.S. Geological Survey, USGS Fact Sheet FS-123-00, October 2000, 2 pages
	C10	Horizontal and Multilateral Wells, Society of Petroleum Engineers, website: <a href="http://www.spe.org/spe/jsp/basic_pf/0,,1104_1714_1003974,00.html">http://www.spe.org/spe/jsp/basic_pf/0,,1104_1714_1003974,00.html</a> , printed December 27, 2006, 5 pages
	C11	Notification of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration (3 pages), International Search Report (7 pages), and Written Opinion of the International Searching Authority (7 pages) for International Application No. PCT/US2006/021057 dated January 4, 2007
	C12	Palmer, I. D., Mavor, M. J., Spitler, J. L. and Volz, R. F., "Openhole Cavity Completions in Coalbed Methane Wells in the San Juan Basin," Journal of Petroleum Technology, Vol. 45, No. 11, November 1993, 11 pages
	C13	V.S. Orlov, et al., "Methods for Simultaneous Segregated Production from Multiple Formations Using Single Well," Series Petroleum Engineering, Moscow, Aurdomeogi, 1976, translated pages 6-11, 28-29 and 36-37, 15 pages
	C14	Kalinin A.G., et al., "Boring of Slanted and Horizontal Well Bores," Moskva, Nedra 1997, pp. 453-458, Sections 11.2, 11.2.2, and 11.2.3, 10 pages

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	